|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Date | Air Temp | Water Temp | Conductivity | Relative Humidity | pH | | DO | | Nitrate | Phosphate | | Velocity | Discharge Rate |
| 6/12  LIA | 26 | 24 | ------ | 93% | 7 | 7 | 9.6 | -- | <1 | | <1 | 0.40 | 6.12 |
| 6/12  LIB | 26.5 | 24 | ------- | 100% | 7 | 7 | 8.2 | --- | <1 | | <1 | 0.60 | 8.21 |
| 6/14  MC | 23.5 | 21.5 | ------- | 83% | 6.5 | 6.5 | 7.5 | 7.4 | <1 | | <1 | 0.43 | 7.08 |
| 6/19  LIA | 25 | 21 | 140 | 84.6% | 7 | 7 | 6.8 | 7 | <1 | | <1 | 0.25 | 2.64 |
| 6/19  LIB | 28 | 21 | 150 | 79.3% | 7 | 7 | 7.6 | 7.9 | <1 | | <1 | 0.42 | 5.52 |
| 6/12  MC | 25 | 22 | 110 | 88.9% | 6.5 | 6.5 | 6.4 | 6.2 | <1 | | <1 | 0.30 | 6.88 |
| 6/26  LIA | 29 | 24 | 140 | 100% | 7 | 7.5 | 7 | 7.4 | <1 | | <1 | 0.39 | 7.58 |
| 6/26  LIB | 29 | 23 | 150 | 100% | 6.5 | 6.5 | 6.4 | 6.2 | <1 | | <1 | 0.29 | 3.52 |
| 6/28  MC | 31 | 23 | 110 | 94.6% | 6.5 | 6.5 | 5.8 | 5.8 | <1 | | <1 | 0.40 | 6.07 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | E. Coli (cfu/ml) and Coliform | | |  |
| Date | Long Island A:  E. Coli | Long Island A:  Coliform | Long Island B:  E. Coli | Long Island B:  Coliform |
| 6/12/12 | 0 | 2 | 0 | 2 |
| 6/19/12 | 0 | 2 | 0 | 2 |
| 6/26/12 | 0 | 2 | 0 | 2 |

n=3 1= none 2= <50% of plate 3= >50% of plate TNTC= too numerous to count

|  |  |  |
| --- | --- | --- |
| E. Coli (cfu/ml) and Coliform | | |
|  | | |
| Date | Marsh Creek:  E. Coli | Marsh Creek :  Coliform |
| 6/14/12 | 0 | 3 |
| 6/21/12 | 0 | 2 |
| \*6/21/12 | 0 | TNTC |
| 6/28/12 | 0 | 2 |

n=3 1= none 2= <50% of plate 3= >50% of plate TNTC= too numerous to count

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| E. Coli (cfu/ml) | | | | | | | | | | | | |
| Date | LI 1A | LI 1B | LI 2A | LI 2B | LI 3A | LI 3B | LI 4A | LI 4B | LI 5A | LI 5B | LI 6A | LI 6B |
| 6/12/12 | 1433 | 1533 | 1100 | 1000 | 3500 | 600 | 0 | 0 | 1100 | 1267 | 1467 | 1000 |
| 6/19/12 | 1167 | 1133 | 933 | 533 | 1633 | 267 | 0 | 0 | 300 | 300 | 700 | 667 |
| 6/26/12 | -------- | 533 | 1500 | 1300 | 733 | 67 | 0 | 0 | 367 | 533 | 267 | 700 |

n=3 TNTC= too numerous to count

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Coliform | | | | | | | | | | | | |
| Date | LI 1A | LI 1B | LI 2A | LI 2B | LI 3A | LI 3B | LI 4A | LI 4B | LI 5A | LI 5B | LI 6A | LI 6B |
| 6/14/12 | 3 | 3 | ------- | -------- | 3 | -------- | 2 | 2 | 3 | 3 | 2 | 2 |
| 6/21/12 | 3 | 3 | ------- | -------- | -------- | -------- | 2 | 2 | 2 | 2 | 2 | 2 |
| 6/28/12 | -------- | 2 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |

n=3 1= none 2= <50% of plate 3= >50% of plate TNTC= too numerous to count

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| E. Coli (cfu/ml) | | | | | | | |
|  | | | | | | | |
| Date | E. Coli:  MC 1 | E. Coli:  MC 2 | E. Coli:  MC 3 | E. Coli:  \*MC 3 | E. Coli:  MC 4 | E. Coli:  MC 5 | E. Coli:  MC 6 |
| 6/14/12 | 2220 | -------- | 500 | 733 | 0 | 0 | TNTC |
| 6/21/12 | 9767 | 1833 | 200 | ----- | 0 | 233 | 533 |
| 6/28/12 | --------- | 400 | 300 | 300 | 0 | 100 | 667 |

n=3 TNTC= too numerous to count

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Coliform | | | | | | | |
|  | | | | | | | |
| Date | Coliform:  MC 1 | Coliform:  MC 2 | Coliform: MC 3 | Coliform:  \* MC 3 | Coliform:  MC 4 | Coliform:  MC 5 | Coliform:  MC 6 |
| 6/14/12 | 3 | ----------- | ----------- | ----------- | 2 | TNTC | TNTC |
| 6/14/12 | 3 | ----------- | ------------ | ----------- | 2 | 2 | 2 |
| 6/28/12 | ----------- | 2 | 1 | 2 | 2 | 1 | 2 |

n=3 1= none 2= <50% of plate 3= >50% of plate TNTC= too numerous to count

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| |  | | --- | | **Scientific Name**  **of Species** | | Common Name  of Species | 2012 Number of Species Captured | Tolerance | Feeding Guild | Category |
| *Campostomoa pauciradii* | Bluefin stoneroller | 9 | ---------- | HB | ---------- |
| *Nocomis leptocephalus* | Bluehead Chub | 3 | ---------- | GE | ---------- |
| *Pimerphales promelas* | Fathead Minnow | 0 | ----------- | ----------- | ----------- |
| *Notropis lutipinnis* | Yellowfin shiner | 5 | ---------- | IC | ---------- |
| *Semotilus thoreauianus* | Dixie Chub | 15 | ---------- | GE | ---------- |
| *Catostomus commersoni* | White sucker | 7 | ---------- | IN | RBS |
| *Hypentelium etowanum* | Alabama hogsucker | 18 | ---------- | IN | RBS |
| *Ameiurus brunneus* | Snail Bullhead | 0 | ---------- | ---------- | ------------ |
| *Ameiurus natalis* | Yellow bullhead | 2 | ---------- | GE | ------------ |
| *Ameiurus nebulosus* | Black bullhead | 2 | HWI | GE | ---------- |
| *Fundulus stellifer* | Southern studfish | 2 | ---------- | IN | ---------- |
| *Lepomis auritus* | Redbreast sunfish | 16 | ---------- | IN | SF |
| *Lepomis macrochirus* | Bluegill sunfish | 2 | ---------- | IN | SF |
| *Micropterus salmoides* | Largemouth Bass | 0 | ---------- | ---------- | ---------- |
| *Percina nigrofasciata* | Blackbanded Darter | 0 | ---------- | ---------- | ---------- |

|  |  |  |  |
| --- | --- | --- | --- |
| IBI Metrics | LI 2011:  Metric Score (1, 3 or 5) | LI 2012:  Raw Score | LI 2012:  Metric Score  (1, 3, or 5) |
| Number of native species | 3 | 10 | 3 |
| Number of benthic invertivore species | 1 | 0 | 1 |
| Number of native sunfish species | 3 | 2 | 3 |
| Native insectivorous cyprinid species | 1 | 1 | 1 |
| Head water intolerance | 1 | 2 | 3 |
| Round bodied sucker species | 1 | 1 | 1 |
| Species eveness | 5 | 86.8 | 5 |
| Percent of fish as Lepomis species | 5 | 22.2% | 5 |
| Percent of fish as insectivorous cyprinids | 1 | 6.2% | 1 |
| Percent of fish as generalists or herbivores | 3 | 38/3% | 3 |
| Percent of fish as benthic fluvial specialist | 1 | 30.9% | 3 |
| Percent of individuals per 200 m of stream | 1 | 216 | 1 |
| DELT Anomalies | 0 | 0 | 0 |
| Overall IBI score (range 8-60) | 26 | ------------- | 30 |
| IBI narrative rank (very poor, poor, fair, good, excellent) | poor | -------------- | poor |